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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2007/0236469 A1**
(43) **Pub. Date: Oct. 11, 2007**(54) **FLUID LEVEL SENSING UTILIZING A
MUTUAL CAPACITANCE TOUCHPAD
DEVICE**(52) **U.S. Cl. 345/173**(76) **Inventors: Richard Woolley, Orem, UT (US);
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G06F 3/041 (2006.01)**(57) **ABSTRACT**

A capacitance-sensitive sensor array and associated touchpad sensor circuitry, the sensor array comprised of a flexible substrate having a plurality of printed conductor elements disposed thereon to form the sensor array, the printed conductor elements being coupled to touchpad sensor circuitry that includes data processing capabilities, wherein the sensor array is disposed along an outside surface of a container, wherein the sensor array is capable of conforming to a curved or irregular outside surface of the container, wherein the sensor array detects at least one characteristic of at least one fluid disposed within the container, and wherein the touchpad sensor circuitry processes data received from the sensor array to provide information regarding the at least one fluid.

